

REMARKS

This Amendment, submitted in response to the non-final Office Action dated November 16, 2004, is believed to be fully responsive to the points of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1, 3, 4, 8-10, 12-15, 18-30, 33-39 and 41 are pending. Claims 11, 17, 31 and 32 are cancelled above. Claims 1, 3, 9, 12, 13, 14, 15, 24 and 39 are amended above. No new matter is added by the amendments.

Claims 1, 3, 4, 9-15, 18-20, 22-27, 39 and 41 have been rejected under 35 USC 103(a) over US Patent No. 6,717,152 (Izumi). Claims 28-30 have been rejected under 35 USC 103(a) over Izumi, in view of U.S. Patent No. 6,636,581 (Sorenson). Claims 31 and 32 have been rejected under 35 USC 103(a) over Izumi, in view of U.S. Patent No. 6,031,234 (Albagli). Claims 33-36 and 38 have been rejected under 35 USC 103(a) over Izumi, in view of Sorenson. Claim 37 has been rejected under 35 USC 103(a) over Izumi, in view of U.S. Patent No. 3,775,612 (Foster). Claim 38 has been rejected over Izumi, in view of Sorenson. Claim 8 has been allowed. The Examiner indicated that Claim 17 would be allowable if rewritten in independent form. Applicants respectfully submit the following remarks in support of the patentability of the claims.

1. Claims 3, 4, 8-10, 13 and 14:

Claims 3, 4, 9, 10, 13 and 14 have been rejected under 35 USC 103(a) over Izumi. Claim 8 has been allowed. As amended above, Claims 3, 4, 9, 10, 13 and 14 depend from Claim 8. Accordingly, Applicants respectfully submit that Claims 3, 4, 8-10, 13 and 14 are in condition for allowance and request that the rejections of Claims 3, 4, 9, 10, 13 and 14 be withdrawn.

2. Claims 15 and 18-23:

Claims 15, 18-20, 22 and 23 have been rejected under 35 USC 103(a) over Izumi. Applicants could not find a rejection of Claim 21 in the November 16, 2004 Office Action. The Examiner indicated that Claim 17 would be allowable if rewritten in independent form. Claim 15 has been amended to include the additional recitations of previous Claim 17. Claims 18-23 depend from Claim 15. Accordingly, Applicants

respectfully submit that Claims 15 and 18-23 are in condition for allowance and request that the rejections of Claims 15 and 18-23 be withdrawn.

3. Claims 1, 12, 39 and 41:

Claims 1, 11, 12, 39 and 41 have been rejected under 35 USC 103(a) over Izumi. Claim 1 has been amended to include the additional recitations of previous claim 11. Claim 12 has been amended to depend from Claim 1, and Claim 11 has been cancelled. Amended Claim 1 recites in part that each of the TFTs includes a gate electrode, a semiconductive region comprising an organic semiconductor and disposed over the gate electrode, and a source electrode and a drain electrode in contact with the semiconductive region. In contrast, Izumi teaches that the TFT element 4 is either a-Si or p-Si, neither of which is an organic semiconductor. Organic semiconductors are discussed on paragraph 32 on page 8 of the present application, and examples of organic semiconductors include pentacene, naphthalene, Cu-phthalocyanine, and alpha-sexithienyl. Applicants wish to note that semiconductor film 2, 12, 26 of Izumi is employed in direct conversion imagers and is unrelated to the semiconductive region of the TFTs. Accordingly, the discussion in Col. 11, lines 45-54 is not germane.

Claim 39 has been amended to further recite that each of TFTs includes a gate electrode, a semiconductive region comprising an organic semiconductor and disposed over the gate electrode, and a source electrode and a drain electrode in contact with the semiconductive region. Claim 41 depends from Claim 39. Applicants respectfully submit that the arguments presented above with respect to Claims 1 and 12 apply with equal force to Claims 39 and 41.

In view of the above Applicants respectfully submit that Claims 1, 12, 39 and 41 are patentably distinguishable over the cited art and respectfully request that the rejections of Claims 1, 12, 39 and 41 be withdrawn.

4. Claims 24-27:

Claims 24-27 have been rejected under 35 USC 103(a) over Izumi. Claim 24 has been amended to clarify that the digital imaging method includes conforming a digital imager to a surface of the subject. Support for the amendment can be found, for example,

in FIGS. 8 and 9 of the present application. Although Izumi (Col. 11, lines 40-42, FIGS 2-6, for example) discloses deforming substrate 25 into a curved shape either before or after forming the semiconductor film 26, Izumi does not teach or suggest conforming a digital imager to a surface of the subject, as recited by Claim 24. Rather, as shown in FIGS. 4 and 5 show, detecting device 60 is not conformed to the surface of the subject 21, 23. Instead the detecting device 60 appears to be curved such that an electromagnetic wave is substantially vertically incident onto a surface of the detecting device at an arbitrary position of the detecting device (Col. 13, lines 43-50). Accordingly, Applicants respectfully submit that Claim 24 is patentably distinguishable over the cited art. Further, as Claims 25-27 depend from Claim 24, these claims are also patentably distinguishable over the cited art, for at least these reasons. In view of the above, Applicants respectfully request that the rejections of Claims 24-27 be withdrawn.

5. Claims 28-30:

Claims 28-30 have been rejected under 35 USC 103a over Izumi, in view of Sorenson. Claim 28 depends from Claim 24 and further recites that the subject is a portion of an aircraft. Claim 29 depends from Claim 28 and further recites that the subject is a fuselage and that the conforming step comprises wrapping the imager around at least a portion of the fuselage. Claim 30 also depends from Claim 28 and further recites that the subject is an aircraft wing, and that the conforming step comprises wrapping the imager around at least a portion of the aircraft wing. Izumi is directed to medical imaging and does not teach the additional recitations of Claims 28-30. The Examiner cites Sorensen to supply these additional recitations of Claims 28-30.

Sorenson is directed to an inspection system and method. The Examiner cites Sorenson as teaching that x-ray inspection of aging aircraft would provide superior detection of cracks (Col. 1, lines 33-35). However, Sorenson does not supply the deficiencies of Izumi described above with respect to independent claim 24. Accordingly, Applicants respectfully submit that Claims 28-30 are patentably distinguishable over the cited art. In view of the above, Applicants respectfully request that the rejections of Claims 28-30 be withdrawn.

6. Claims 33-36 and 38:

Claims 33-36 and 38 have been rejected under 35 USC 103(a) over Izumi, in view of Sorenson. Claim 33 is directed to a digital imaging method for imaging a subject, the digital imaging method including embedding at least one digital imager in the subject, activating a radiation source to expose the subject to a diverging radiation beam, a portion of the subject being positioned between the radiation source and the digital imager and collecting an image with the digital imager. Claim 34 depends from Claim 33 and further recites that the subject comprises a section of an aircraft structure. Claim 35 depends from claim 34 and further recites that the subject comprises a fuselage, and that the embedding step comprises embedding the digital imager between the fuselage and an insulation layer. Claim 38 depends from Claim 33 and further recites that the embedding step comprises embedding a number of digital imagers in the subject.

Neither Izumi nor Sorenson teaches or suggests embedding at least one digital imager in the subject, as recited by Claim 33. Rather, Izumi is directed to medical applications, and Sorenson is directed to a gantry system for moving a detector around a fuselage. Accordingly, Applicants respectfully submit that Claim 33 is patentably distinguishable over the cited art, for at least these reasons. Further, as Claims 35, 36 and 38 depend from claim 33, these claims are also patentably distinguishable over the cited art for at least these reasons. In view of the above, Applicants respectfully request that the rejections of Claims 33-36 and 38 be withdrawn.

8. Claim 37:

Claim 37 has been rejected under 35 USC 103(a) over Izumi, in view of Foster. Claim 37 depends from Claim 33 and further recites that the subject comprises a section of a pipeline. As noted by the Examiner, Izumi does not teach or suggest embedding at least one digital imager in the subject. Nor does Izumi teach or suggest using a digital imager to inspect pipelines. The Examiner cites Foster as showing the use of x-ray imaging to inspect pipe welds (Abstract). However, Foster is directed to a pipeline crawler for moving a radiographic unit attached to the crawler through the pipeline (Abstract). Foster does not disclose embedding a digital detector in the pipeline. Rather, Foster teaches placing a film over the weld outside the wall (Col. 9, lines 23-24). Accordingly, Applicants respectfully submit that Claim 37 is patentably distinguishable

over the cited art, for at least these reasons, and request that the rejection of Claims 37 be withdrawn.

In view of the above, Applicants respectfully submit that Claims 1, 3, 4, 8-10, 12-15, 18-30, 33-39 and 41 are in condition for allowance.

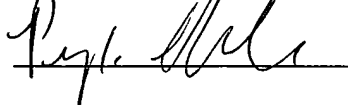
CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Please charge all applicable fees associated with the submittal of this Amendment and any other fees applicable to this application to the Assignee's Deposit Account No. 07-0868.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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